

REMARKS

Claims 1-3 and 5-14 are pending in the present application. Claim 1 is amended, claims 13 and 14 are added and claim 4 is canceled in this response. Claims 2-3 and 11-12 are withdrawn from consideration. Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 102/ § 103

Claims 1 and 4-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rhodes (U.S. Patent No. 4,700,550, hereinafter “Rhodes”).

Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rhodes in view of Kirby (U.S. Patent No. 4,703,886, hereinafter “Kirby”).

These rejections are respectfully traversed.

Independent claim 1 as amended recites, *inter alia*, “wherein the heating medium circuit includes at least two air heat exchangers which mainly perform air sensible heat processing and at least two adsorption heat exchangers which mainly perform air latent heat processing and the at least two adsorption heat exchangers are provided with an adsorbent supported on a surface thereof.”

Rhodes describes a desiccant air conditioning system includes conventional metal surface liquid-to-air type heat exchangers (82, 84), which are positioned in the air conditioning air flow upstream from respective heat exchanging desiccant beds (12, 14). The heat exchanging desiccant beds have desiccant material surfaces defining air passageways through the desiccant beds. The desiccant material surfaces adsorb moisture from building air during an adsorption phase and desorb moisture into exhaust air during a desorption phase. The conventional heat exchanger 82 serves to preheat the desorbing exhaust air passing through the air passageways of desiccant bed unit 12. And the conventional heat exchanger 84 pre-cools the warm building air to increase its relative humidity and thereby increase the adsorption of moisture on the desiccant material surfaces of heat exchanging desiccant bed 14. See line 23, col. 16 to line 28, col. 17, Abstract and Figure 9 of Rhodes. However, Rhodes fails to disclose or suggest at least two air

heat exchangers which mainly perform air sensible heat processing and at least two adsorption heat exchangers which mainly perform air latent heat processing as recited in claim 1.

In contrast, Rhodes is directed to utilizing heat exchanging desiccant beds to perform both air latent heat processing and air sensible heat processing. Specifically, the refrigerant passing through the heat exchanging desiccant bed 14 carries away the latent heat of condensation of moisture adsorbed from humid building air on the desiccant bed and sensible heat from the air passing through the air passageways of heat exchange desiccant bed unit 14. Furthermore, the system of Rhodes may place conventional metal surface liquid-to-air type heat exchangers upstream in the refrigerant circulating line from the heat exchanging desiccant beds for pre-cooling to increase the adsorption and condensation of moisture from the air on the desiccant material surfaces of desiccant bed unit (14) and for preheating to increase desorption and evaporation of moisture from the desiccant material surface during recharging of heat exchanging desiccant bed unit (12). See lines 2-41, col. 15 and line 46, col. 16 to line 13, col. 17 of Rhodes. In other words, the heat exchanging desiccant beds serve to perform both air latent heat processing and air sensible heat processing and the conventional heat exchangers are included to increase the effectiveness of the desiccant beds in air latent heat processing. This is wholly unlike the present invention which provides at least two air heat exchangers which mainly perform air sensible heat processing and at least two adsorption heat exchangers which mainly perform air latent heat processing and the at least two adsorption heat exchangers are provided with an adsorbent supported on a surface thereof" as recited in claim 1.

In view of the above remarks and amendments, it is respectfully submitted that Rhodes does not anticipate claim 1. Kirby is directed to a thermostat for controlling heating and cooling. However, Kirby does not remedy the above-noted deficiencies of Rhodes. As claims 4-10 and new claims 13 and 14 are dependent to claim 1, it is respectfully submitted that these claims are also patentable for at least their dependency. Thus, it is further respectfully submitted that these rejections should be withdrawn.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Dennis P. Chen Reg. No. 61,767 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By

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